



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING™

NOV 09 2010

Joseph Miller  
West Kern Water District  
PO Box 1105  
Taft, CA

**Re: Notice of Preliminary Decision - Title V Permit Renewal  
District Facility # S-348  
Project # S-1072125**

Dear Mr. Miller:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for West Kern Water District for its water district facility located near the intersection of Highway 119 and CA Aqueduct, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

**Attachments**

C: John Yoshimura, Permit Services Engineer

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING™

NOV 09 2010

Mike Tollstrup, Chief  
Project Assessment Branch  
Air Resources Board  
P O Box 2815  
Sacramento, CA 95812-2815

**Re: Notice of Preliminary Decision - Title V Permit Renewal  
District Facility # S-348  
Project # S-1072125**

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for West Kern Water District for its water district facility located near the intersection of Highway 119 and CA Aqueduct, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

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# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



NOV 09 2010

Gerardo C. Rios, Chief  
Permits Office (AIR-3)  
U.S. EPA - Region IX  
75 Hawthorne St.  
San Francisco, CA 94105

**Re: Notice of Preliminary Decision – Title V Permit Renewal  
District Facility # S-348  
Project # S-1072125**

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for West Kern Water District for its water district facility located near the intersection of Highway 119 and CA Aqueduct, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

**Attachments**

C: John Yoshimura, Permit Services Engineer

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**NOTICE OF PRELIMINARY DECISION  
FOR THE PROPOSED RENEWAL OF  
THE FEDERALLY MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed renewal of the Federally Mandated Operating Permit to West Kern Water District for its water district facility located near the intersection of Highway 119 and CA Aqueduct, California.

The District's analysis of the legal and factual basis for this proposed action, project #S-1072125, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and the District office at the address below. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed renewal of the Federally Mandated Operating permit. If requested by the public, the District will hold a public hearing regarding issuance of this renewed permit. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed renewed permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CALIFORNIA 93726-0244.

# **SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT**

## **Proposed Title V Permit Renewal Evaluation West Kern Water District Facility # S-348**

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# **TITLE V PERMIT RENEWAL EVALUATION**

## **West Kern Water District**

**Engineer:** John Yoshimura  
**Date:** 8/20/10

**Facility Number:** S-348  
**Facility Name:** West Kern Water District  
**Mailing Address:** PO Box 1105  
Taft, CA 93268

**Contact Name:** Joseph Miller  
**Phone:** (661) 763-3151 ext. 129

**Responsible Official:** Jerry Pearson  
**Title:** General Manager

**Project # :** S-1072125  
**Deemed Complete:** 5/18/07

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### **I. PROPOSAL**

West Kern Water District's previous Title V permit renewal was finalized on October 22, 2003. The Title V permit expired on October 31, 2007. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

### **II. FACILITY LOCATION**

Station A is located in section NE5, Township 31S, Range 25E, near the intersection of Highway 119 and CA aqueduct.

### **III. EQUIPMENT LISTING**

A detailed facility printout listing all permitted equipment at the facility is included as Attachment C.

### **IV. GENERAL PERMIT TEMPLATE USAGE**

The applicant does not propose to use any model general permit templates.

### **V. SCOPE OF EPA AND PUBLIC REVIEW**

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

### **VI. FEDERALLY ENFORCEABLE REQUIREMENTS**

#### **Rules Updated**

- District Rule 2020, Exemptions  
(amended September 21, 2006 ⇒ amended December 20, 2007)
- District Rule 2201, New and Modified Stationary Source Review Rule  
(adopted September 19, 1991 ⇒ amended December 18, 2008)
- District Rule 4001, New Source Performance Standards  
(amended September 17, 1997 ⇒ amended April 14, 1999)
- District Rule 4002, National Emission Standards for Hazardous Air Pollutants (amended May 18, 2000 ⇒ amended May 20, 2004)
- District Rule 4101, Visible Emissions  
(amended November 15, 2001 ⇒ amended February 17, 2005)
- District Rule 4601, Architectural Coatings  
(amended October 31, 2007 ⇒ amended December 17, 2009)
- District Rule 4701, Internal Combustion Engines  
(amended December 19, 2002 ⇒ amended August 21, 2003)
- District Rule 4702, Internal Combustion Engines – Phase 2  
(adopted August 21, 2003 ⇒ amended January 18, 2007)
- District Rule 8011, General Requirements  
(Adopted November 15, 2001 ⇒ amended August 19, 2004)

- District Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities  
(adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8031, Bulk Materials  
(adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8041, Carryout and Trackout  
(adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8051, Open Areas  
(adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8061, Paved and Unpaved Roads  
(adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas  
(adopted November 15, 2001 ⇒ amended September 16, 2004)
- 40 CFR Part 60, Subpart JJJJ, Standards for Performance for Stationary Spark Ignition Internal Combustion Engine  
(amended July 11, 2006)
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos  
(amended November 9, 2007)
- 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Emissions (RICE) (amended January 18, 2008)
- 40 CFR Part 82, Subpart B and Subpart F, Stratospheric Ozone  
(amended June 8, 2008)

#### **Rules Not Updated**

- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2040, Applications (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)



- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2520, Federally Mandated Operating Permits (adopted June 15, 1995 ⇒ amended June 21, 2001 )
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4202, Particulate Matter - Emission Rate (amended December 17, 1992)
- District Rule 4801, Sulfur Compounds (amended December 17, 1992)
- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)

## **VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE**

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as "Federally Enforceable Through Title V Permit".

For this facility, the following are not federally enforceable and will not be discussed in further detail:

### **A. Rules Not Updated**

District Rule 4102, Nuisance (as amended December 17, 1992)

Condition 42 of permit unit '-0-2 is based on District Rule 4102 and will therefore not be discussed any further.

## **VIII. PERMIT REQUIREMENTS**

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this compliance section serves to address rules that have been amended or added since the issuance of the initial Title V permit. This section will also address rules not adequately addressed in the initial Title V project.

The renewed PTOs were also revised, if applicable, by removing the county rule references for the counties other than the one the facility is actually located in or by removing all county references as obsolete due to a governing District rule

contained in the SIP. The following updated conditions reflect correct references:

- Conditions 1, 2, 22 and 39 on the draft facility-wide PTO (S-353-0-2).

**A. District Rule 2020 - Exemptions**

District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any affect on current permit requirements and will therefore not be addressed in this evaluation.

**B. District Rule 2201 - New and Modified Stationary Source Review Rule**

District Rule 2201 has been amended since this facility's initial Title V permit was issued. This Title V permit renewal does not constitute a modification per section 3.26, defined as an action including at least one of the following items:

- 1) Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
- 2) Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
- 3) An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.
- 4) Addition of any new emissions unit which is subject to District permitting requirements.
- 5) A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Therefore, the updated requirements of this rule are not applicable at this time.

**C. District Rule 4001 - New Source Performance Standards (NSPS)**

**40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**

§60.4230(a)(1) through (a)(5) specify the stationary spark ignition (SI) internal combustion engines (ICE) subject to the provisions of this subpart. For the

purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

Section (a)(1) applies to stationary SI ICE with a maximum engine power less than or equal to 19 kilowatt (KW) (25 horsepower (HP)) that are manufactured on or after July 1, 2008. Permit units S-348-1-12, '2-12, '3-12, '4-9, '5-4 and '6-3 each have maximum engine power greater than 25 bhp. Therefore, this section does not apply.

Section (a)(2) applies to stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline fueled or that are rich-burn engines fueled by liquefied petroleum gas (LPG), where the date of manufacture is:

- (i) On or after July 1, 2008; or
- (ii) On or after January 1, 2009, for emergency engines.

Permit units S-348-1-12, '2-12, '3-12 and '5-4 are rich-burn engines fueled by natural gas and LPG with a maximum engine rating over 25 bhp, but were manufactured before July 1, 2008. Permit unit '4-9 is a rich-burn engine with LPG as back-up fuel with a maximum engine rating over 25 bhp, but was manufactured before July 1, 2008. Permit unit '6-3 is an emergency rich-burn engine fueled by natural gas and propane, but was manufactured before January 1, 2009. Therefore, this section does not apply.

Section (a)(3) applies to stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:

- (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
- (ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
- (iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
- (iv) On or after January 1, 2009, for emergency engines.

Permit units S-348-1-12, '2-12, '3-12, '4-9 and '5-4 are rich-burn engines fueled by LPG and natural gas and were manufactured before July 1, 2007.

Permit unit '-6-3 is an emergency rich-burn engine fueled by propane/LPG and was manufactured before January 1, 2008. Therefore, this section does not apply.

Section (a)(4) applies to stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

- (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
- (ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
- (iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
- (iv) On or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

Permit units S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 are rich-burn engines with a maximum engine power rating greater than 500 bhp, but were manufactured before July 1, 2008. Permit unit '-6-3 is an emergency engine with a maximum engine power greater than 25 bhp, but was manufactured before January 1, 2009. Therefore, this section does not apply.

Section (a)(5) applies to stationary SI ICE that commence modification or reconstruction after June 12, 2006. Permit units S-348-1-12, '-2-12, '-3-12, '-4-9, '-5-4 and '-6-3 have not commenced modification or reconstruction after June 12, 2006. Therefore, this section does not apply.

Permit units S-348-1-12, '-2-12, '-3-12, '-4-9, '-5-4 and '-6-3 do not meet any of the applicability requirements listed in §60.4230(a)(1) through (a)(5). Therefore, the requirements of 40 CFR 60 Subpart JJJJ does not apply to these engines.

**D. District Rule 4002 – National Emission Standards for Hazardous Air Pollutants**

**40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary

reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§63.6585(b) states, "A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site."

§63.6585(c) states, "An area source of HAP emissions is a source that is not a major source."

The facility is not a major source as defined in §63.6585(b). Therefore, this facility is an area source of HAP emissions.

§63.6590(a) states, "An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand."

§63.6590(a)(1) defines the criteria for an existing stationary RICE as follows:

- (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.
- (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

This facility is an area source of HAP emissions. Permit units S-348-1-12, '-2-12, '-3-12, '-4-9, '-5-4 and '-6-3 at this facility have not commenced construction or reconstruction on or after June 12, 2006. Therefore, the engines at this facility meet the definition of an existing stationary RICE as defined in §63.6590(a)(1)(iii).

§63.6590(b) - Stationary RICE subject to limited requirements, states that an engine which meets the criteria in paragraph (b)(3) of this section does not have to meet the requirements of this subpart and of subpart A of this part. Furthermore, no initial notification is necessary. The criteria are summarized as follows:

(b)(3) A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source of HAP emissions; an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions; an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE; an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE; an existing compression ignition emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing spark ignition emergency or limited use stationary RICE; an existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; or an existing stationary residential, commercial, or institutional emergency stationary RICE located at an area source of HAP emissions, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

Permit units S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 are existing spark ignition 4SRB stationary RICE located at an area source of HAP emissions. Permit unit '-6-3 is an existing spark ignition emergency stationary RICE. Therefore, these engines do not have to meet the requirements of this subpart and of subpart A of this part, and no initial notification is necessary.

#### **E. District Rule 4101 - Visible Emissions**

District Rule 4101 has been submitted to the EPA to replace SIP approved Rule 401 (all counties of the SJVUAPCD). EPA made a preliminary determination that District Rule 4101 is "more stringent" than the county versions previously referenced, per correspondence dated August 20, 1996.

Section 5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in Section 5.1 of Rule 4101. Condition 22 of permit S-348-0-2, condition 14 of permits '-6-3 ensure continued compliance. The following condition will be listed on permits '-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

**F. District Rule 4601 - Architectural Coatings**

The latest version of District Rule 4601 (amended 12/17/09) has not been SIP approved. Attachment D contains the streamlining of the SIP approved District Rule 4601 (10/31/01) to the current District Rule 4601 to show the current rule is as stringent if not more than the SIP approved version. Conditions 23 through 25 on the facility wide permit (S-348-0-2) demonstrate compliance with the requirements of the latest version of this rule.

**G. District Rule 4701 – Internal Combustion Engines – Phase 1**

The purpose of this rule is to limit the emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines. Except as provided in Section 4.0, the provisions of this rule apply to any internal combustion engine, rated greater than 50 bhp, that requires a Permit to Operate (PTO).

There are six natural-gas/LPG fired IC engines (permit units S-348-1-12, '-2-12, '-3-12, '-4-9, '-5-4 and '-6-3) permitted at West Kern Water District. Pursuant to Section 2.0 of District Rule 4701, the engines are subject to District Rule 4701 - *Internal Combustion Engines – Phase 1*. In addition, the engines are subject to District Rule 4702 - *Internal Combustion Engines – Phase 2*.

The six IC engines are in compliance with the emissions limits listed in Table 1, Section 5.1 of District Rule 4702 and with all other requirements from District Rule 4702. Since the emissions limits of District Rule 4702 and all other requirements are equivalent or more stringent than District Rule 4701 requirements, compliance with 4702 rule requirements will satisfy requirements of District Rule 4701.

Therefore, the six permitted IC engines comply with District Rule 4701 requirements and no further discussion is required.

**H. District Rule 4702 – Internal Combustion Engines – Phase 2**

The purpose of this rule is to limit the emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC) from spark-ignited internal combustion engines.

This rule applies to any spark-ignited internal combustion engine with a rated brake horsepower greater than 50 horsepower and that requires a Permit-to-Operate (PTO).

Section 5.1 requires that the owner of an internal combustion engine shall not operate it in such a manner that results in emissions exceeding the limits in the Engine Emission Limits table below for the appropriate engine type, according to the compliance schedule listed in Section 7.0. An engine shall be restricted by permit condition to emissions limits, in ppmv (corrected to 15% oxygen on a dry basis), that meet or exceed the following applicable emission limits pursuant to Section 5.1 or Section 8.2.

Rule 4702 Emission Limits			
Engine Type	NO <sub>x</sub> Emission Limit (ppmv @ 15% O <sub>2</sub> , dry)	CO Emission Limit (ppmv @ 15% O <sub>2</sub> , dry)	VOC Emission Limit (ppmv @ 15% O <sub>2</sub> , dry)
1. c. Rich Burn, All Other Engine	25 ppmv or 96% reduction	2,000 ppmv	250 ppmv
2. b. Lean Burn, All Other Engine	65 ppmv or 90% reduction	2,000 ppmv	750 ppmv

**S-348-1-12 (Rich-burn)**

- the proposed NO<sub>x</sub> emission factor is 25 ppmvd @ 3% O<sub>2</sub>
- the proposed CO emission factor is 2,000 ppmvd @ 3% O<sub>2</sub>
- the proposed VOC emission factor is 125 ppmvd @ 3% O<sub>2</sub>

**S-348-2-12 (Rich-burn)**

- the proposed NO<sub>x</sub> emission factor is 25 ppmvd @ 3% O<sub>2</sub>
- the proposed CO emission factor is 2,000 ppmvd @ 3% O<sub>2</sub>
- the proposed VOC emission factor is 125 ppmvd @ 3% O<sub>2</sub>

**S-348-3-12 (Rich-burn)**

- the proposed NO<sub>x</sub> emission factor is 25 ppmvd @ 3% O<sub>2</sub>
- the proposed CO emission factor is 2,000 ppmvd @ 3% O<sub>2</sub>
- the proposed VOC emission factor is 125 ppmvd @ 3% O<sub>2</sub>

**S-348-4-9 (Rich-burn)**

- the proposed NO<sub>x</sub> emission factor is 25 ppmvd @ 3% O<sub>2</sub>
- the proposed CO emission factor is 2,000 ppmvd @ 3% O<sub>2</sub>
- the proposed VOC emission factor is 125 ppmvd @ 3% O<sub>2</sub>



**S-348-5-4 (Rich-burn)**

- the proposed NO<sub>x</sub> emission factor is 10.4 ppmvd @ 3% O<sub>2</sub>
- the proposed CO emission factor is 68.4 ppmvd @ 3% O<sub>2</sub>
- the proposed VOC emission factor is 30.0 ppmvd @ 3% O<sub>2</sub>

Therefore, continued compliance with Section 5.1 of District Rule 4702 is expected.

A permit condition listing the emissions limits will be listed on permit as shown in the DEL section above.

Section 5.2 requires that all continuous emission monitoring systems (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes. Any 15-consecutive minute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule. Permit units S-348-1-12, '2-11, '3-12, '4-9 and '5-4 do not have a CEMS installed; therefore this section of the Rule is not applicable.

Section 5.6 requires that the owner of an engine (excluding those engines subject to Section 4.2 or Section 4.3 unless otherwise specified) subject to the requirements of this rule meet the following requirements:

For each engine with a rated brake horsepower of 1,000 hp or greater and which is permitted to operate more than 2,000 hours per calendar year, or with an external emission control device, shall either install, operate, and maintain continuous monitoring equipment for NO<sub>x</sub>, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install, operate, and maintain APCO-approved alternate monitoring. The monitoring system may be a continuous emissions monitoring system (CEMS), a parametric emissions monitoring system (PEMS), or an alternative monitoring system approved by the APCO. APCO-approved alternate monitoring shall consist of one or more of the following:

- Periodic NO<sub>x</sub> and CO emission concentrations,
- Engine exhaust oxygen concentration,
- Air-to-fuel ratio,
- Flow rate of reducing agents added to engine exhaust,
- Catalyst inlet and exhaust temperature,
- Catalyst inlet and exhaust oxygen concentration,
- Other operational characteristics.

The applicant has chosen to meet this section of the Rule by proposing a pre-approved alternate emissions monitoring plan A for engines with external

controls. Plan A for engines with external controls specifies that the permittee perform periodic NO<sub>x</sub>, CO, and O<sub>2</sub> emissions concentrations as specified in District Policy SSP-1810, dated 4/29/04. Therefore, the following condition will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {3205} The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702]

Section 5.6.6 requires that for each engine, including an engine subject to Section 4.2, install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use an alternative device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. The owner or operator shall maintain these required meters in proper operating condition. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. Therefore, the following condition will be placed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {3377} This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]

Section 5.6.7 requires that for each engine, the permittee shall implement the Inspection and Monitoring (I&M) plan submitted to and approved by the APCO pursuant to Section 6.5.

Section 5.6.8 requires that for each engine, the operator collect data through the I&M plan in a form approved by the APCO.

Section 5.6.9 requires that each engine, use a portable NO<sub>x</sub> analyzer to take NO<sub>x</sub> emission readings to verify compliance with the emission requirements of Section 5.1 or Section 8.2 during each calendar quarter in which a source test is not performed. All emission readings shall be taken with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate. The analyzer shall be

calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. All NO<sub>x</sub> emissions readings shall be reported to the APCO in a manner approved by the APCO. NO<sub>x</sub> emission readings taken pursuant to this section shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period. The following condition will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {2994} All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702]

Section 6.1 requires that the owner of an engine to submit to the APCO an emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.1 and the compliance schedules of Section 7.0. West Kern Water District has already satisfied the requirement.

Section 6.2 requires that except for engines subject to Section 4.0, the owner of an engine subject to the requirements of this rule shall maintain an engine operating log to demonstrate compliance with this rule. This information shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request. The engine operating log shall include, on a monthly basis, the following information:

- Total hours of operation,
- Type and quantity (cubic feet of gas or gallons of liquid) of fuel used,
- Maintenance or modifications performed,
- Monitoring data,
- Compliance source test results, and
- Any other information necessary to demonstrate compliance with this rule.

The following condition will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {3211} The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District NSR Rule, Rules 4701 and 4702]

Section 6.2.2 requires that the data collected pursuant to the requirements of Section 5.6 shall be maintained for at least five years, shall be readily available, and made available to the APCO upon request. Therefore, the following condition will be placed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {3213} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702]

Section 6.3 requires that the owner of an engine subject to the emission limits in Section 5.1 or the requirements of Section 8.2, shall:

Demonstrate compliance with applicable limits by the applicable date specified in Section 7.6 and at least once every 24 months thereafter, in accordance with the test methods in Section 6.4.

Conduct emissions source testing with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate. For emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15 percent oxygen. For engines that comply with a percent reduction limit in Table 1, the percent reduction of NO<sub>x</sub> emissions shall also be reported.

In addition to other information, the source test protocol shall describe which critical parameters will be measured and how the appropriate range for these parameters shall be established. The range for these parameters shall be incorporated into the I&M plan.

The following conditions will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {3207} Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702]
- {3208} Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702]
- {3209} For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702]

Section 6.4 requires that the compliance with the requirements of Section 5.0 shall be determined in accordance with the following test procedures or any other method approved by EPA and the APCO:

- Oxides of nitrogen - EPA Method 7E, or ARB Method 100.
- Carbon monoxide - EPA Method 10, or ARB Method 100.
- Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100.
- Volatile organic compounds - EPA Method 25A or 25B, or ARB Method 100.
- Operating horsepower determination - any method approved by EPA and the APCO.

The following condition will be listed on the permits to ensure compliance:

The following condition will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans. [District Rules 1081, 4701, and 4702]

Section 6.5 requires that the owner of an engine subject to the emission limits in Section 5.1 or the requirements of Section 8.2, shall submit to the APCO for approval, an I&M plan that specifies all actions to be taken to satisfy the following requirements and the requirements of Section 5.6. The actions to be identified in the I&M plan shall include, but are not limited to, the following:

Section 6.5.2 specifies procedures requiring the owner or operator to establish ranges for control equipment parameters, engine operating parameters, and engine exhaust oxygen concentrations that source testing has shown result in pollutant concentrations within the rule limits.

Section 6.5.3 specifies procedures for monthly inspections as approved by the APCO. The applicable control equipment parameters and engine operating parameters will be inspected and monitored monthly in conformance with a regular inspection schedule listed in the I&M plan. The alternate monitoring program was implemented to ensure compliance with Sections 6.5.1 and 6.5.2 of the Rule. The following condition will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO]. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within five days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4701, 5.4 and 4702] Y

Section 6.5.4 specifies procedures for the corrective actions on the noncompliant parameter(s) that the owner or operator will take when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NO<sub>x</sub>, CO, VOC, or oxygen concentrations.

Section 6.5.5 specifies procedures for the owner or operator to notify the APCO when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NO<sub>x</sub>, CO, VOC, or oxygen concentrations.

The following condition will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {2993} If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702]

Section 6.5.6 specifies procedures for preventive and corrective maintenance performed for the purpose of maintaining an engine in proper operating condition. The following condition will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {3202} This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702]

Section 6.5.7 specifies procedures and a schedule for using a portable NO<sub>x</sub> analyzer to take NO<sub>x</sub> emission readings pursuant to Section 5.6.9. The following condition will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {2994} All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702]

Section 6.5.8 specifies procedures for collecting and recording required data and other information in a form approved by the APCO including, but not limited to, data collected through the I&M plan and the monitoring systems described in Sections 5.6.1 and 5.6.2. Data collected through the I&M plan shall have retrieval capabilities as approved by the APCO. West Kern Water District has already proposed an alternate monitoring program that will ensure compliance with this Section of the Rule. The following condition will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {2995} The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702]

Section 6.5.9 specifies procedures for revising the I&M plan. The I&M plan shall be updated to reflect any change in operation. The I&M plan shall be updated prior to any planned change in operation. An engine owner that changes significant I&M plan elements must notify the District no later than seven days after the change and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine operating log. For new engines and modifications to existing engines, the I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit-to-Operate. The owner of an engine may request a change to the I&M plan at any time. The following condition will be listed on permits S-348-1-12, '-2-12, '-3-12, '-4-9 and '-5-4 to ensure compliance:

- {3212} The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]

Section 7.6 requires that the owner of an engine subject to the requirements of this rule not operate the engine beyond the compliance dates outlined in the compliance schedule. The conditions listed above ensure the engines are in compliance with all the requirements of Rule 4702.



Section 8.0 allows that an owner may comply with the NO<sub>x</sub> emission requirements of Section 5.1 for a group of engines by meeting the requirements in this Rule. An owner that is subject to the requirements below shall also comply with all the applicable requirements of Sections 5.0, 6.0, and 7.0. An engine that is not subject to Section 5.1 is not eligible for inclusion in an AECP.

The engines are already in compliance. Therefore, this Section of the Rule is not applicable to the engine involved with this project.

**S-348-6-3**

The purpose of this rule is to limit the emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines.

This rule applies to any internal combustion engine with a rated brake horsepower greater than 50 horsepower.

Pursuant to Section 4.3, except for the requirements of Section 6.2.3, the requirements of this rule shall not apply to an internal combustion engine that meets the following conditions:

- 1) The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood, and
- 2) Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed operating time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine, and
- 3) The engine is operated with a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

Therefore, the emergency IC engine involved with this project will only have to meet the requirements of Section 6.2.3 of this Rule.

Section 6.2.3 requires that an owner claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall

be retained for at least five years, shall be readily available, and submitted to the APCO upon request and at the end of each calendar year in a manner and form approved by the APCO. Therefore, the following conditions will be placed on permit unit S-348-6-4 to ensure compliance:

- This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702] Y
- {3500} The permittee shall maintain monthly records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, and the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702] Y
- The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702]
- {3497} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702] Y
- {3403} This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] N
- {3807} An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]
- {3808} This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]

**I. District Rule 8011 - General Requirements**

The purpose of Regulation VIII (Fugitive PM10 Prohibitions) is to reduce ambient concentrations of fine particulate matter (PM10) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions. The Rules contained in this Regulation have been developed pursuant to United States Environmental Protection Agency guidance for Serious PM10 Nonattainment Areas. The rules are applicable to specified anthropogenic fugitive dust sources. Fugitive dust contains PM10 and particles larger than PM10. Controlling fugitive dust missions when visible emissions are detected will not prevent all PM10 emissions, but will substantially reduce PM10 emissions.

The provisions of this rule are applicable to specified outdoor fugitive dust sources. The definitions, exemptions, requirements, administrative requirements, recordkeeping requirements, and test methods set forth in this rule are applicable to all Rules under Regulation VIII (Fugitive PM10 Prohibitions) of the Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District.

Conditions 29 through 34 of permit unit S-348-0-2 ensure compliance.

**J. District Rule 8021 - Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities**

The purpose of this rule is to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities.

This rule applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on site, and travel on access roads to and from the site. This rule also applies to the construction of new landfill disposal sites or modification to existing landfill disposal sites prior to commencement of landfilling activities.

Section 5.0 requires that no person shall perform any construction, demolition, excavation, extraction, or other earthmoving activities unless the appropriate requirements in sections 5.1 and 5.2 are sufficiently implemented to limit VDE to 20% opacity. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

Condition 29 of permit unit S-348-0-2 ensures compliance.

**K. District Rule 8031 - Bulk Materials**

The purpose of this rule is to limit fugitive dust emissions from the outdoor handling, storage, and transport of bulk materials.

This rule applies to the outdoor handling, storage, and transport of any bulk material.

Section 5.0 requires that no person shall perform any outdoor handling, storage, and transport of bulk materials unless the appropriate requirements in Table 8031-1 of this rule are sufficiently implemented to limit VDE to 20% opacity or to comply with the conditions for a stabilized surface as defined in Rule 8011. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

Condition 30 of permit unit S-348-0-2 ensures compliance.

**L. District Rule 8041 - Carryout and Trackout**

The purpose of this rule is to limit fugitive dust emissions from carryout and trackout.

This rule applies to all sites that are subject to Rules 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities), 8031 (Bulk Materials), and 8071 (Unpaved Vehicle and Equipment Traffic Areas) where carryout or trackout has occurred or may occur.

Section 5.0 requires that an owner/operator shall sufficiently prevent or cleanup carryout and trackout as specified in sections 5.1 through 5.8. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII. The use of blower devices, or dry rotary brushes or brooms, for removal of carryout and trackout on public roads is expressly prohibited. The removal of carryout and trackout from paved public roads does not exempt an owner/operator from obtaining state or local agency permits which may be required for the cleanup of mud and dirt on paved public roads.

Condition 31 of permit unit S-348-0-2 ensures compliance.

**M. District Rule 8051 - Open Areas**

The purpose of this rule is to limit fugitive dust emissions from open areas.

This rule applies to any open area having 3.0 acres or more of disturbed surface area, that has remained undeveloped, unoccupied, unused, or vacant for more than seven days.

Section 5.0 requires that whenever open areas are disturbed or vehicles are used in open areas, the owner/operator shall implement one or a combination of control measures indicated in Table 8051-1 to comply with the conditions of a stabilized surface at all times and to limit VDE to 20% opacity. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

Condition 32 of permit unit S-348-0-2 ensures compliance.

**N. District Rule 8061 - Paved and Unpaved Roads**

The purpose of this rule is to limit fugitive dust emissions from paved and unpaved roads by implementing control measures and design criteria.

This rule applies to any new or existing public or private paved or unpaved road, road construction project, or road modification project.

Condition 33 of permit unit S-348-0-2 ensures compliance.

**O. District Rule 8071 - Unpaved Vehicle/Equipment Traffic Area**

The purpose of this rule is to limit fugitive dust emissions from unpaved vehicle and equipment traffic areas by implementing control measures and design criteria.

This rule applies to any unpaved vehicle/equipment traffic area of 1.0 acre or larger.

Condition 34 of permit unit S-348-0-2 ensures compliance.

**P. 40 CFR Part 64 – Compliance Assurance Monitoring (CAM)**

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

- 1) the unit must have an emission limit for the pollutant;
- 2) the unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) the unit must have a pre-control potential to emit of greater than the major source thresholds (20,000 lb-NO<sub>x</sub>/yr; 20,000 lb-VOC/yr; 200,000 lb-CO/yr; 140,000 lb-PM<sub>10</sub>/yr or 140,000 lb-SO<sub>x</sub>/yr are the Major Source thresholds).

**S-348-1-12: 778 HP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-2  
(LIMITED TO MAXIMUM 610 HP)**

1. The permit unit has emission limits for all five criteria pollutants (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC).
2. There are no add-on controls for SO<sub>x</sub> and PM<sub>10</sub>; therefore CAM is not applicable for SO<sub>x</sub> and PM<sub>10</sub>.
3. This permit unit may be subject to CAM for NO<sub>x</sub>, CO and VOC since there are NO<sub>x</sub>, CO and VOC limits and has an add-on control in the form of a 3-way non-selective catalytic converters. Based on the pre-controlled annual emissions (shown below), the major source thresholds of 20,000 lb-NO<sub>x</sub>/yr, 200,000 lb-CO/yr and 20,000 lb-VOC are exceeded. Therefore, the requirements of CAM are triggered.

Annual Post Project Emissions – S-348-1-12					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub> *	7.48	610	8760	453.6	88,118
CO**	16.99	610	8760	453.6	200,149
VOC***	2.91	610	8760	453.6	34,281

\* Emission factor based on Natural Gas use

\*\* Emission factor based on current PTO since it is greater than the CO EF from AP-42

\*\*\* Emission factor based on LPG use

The following conditions were approved during a previous Title V action (Project #S-1020393) and assure compliance with the CAM requirements:

- The engine shall be operated such that the O<sub>2</sub> sensor output voltage is within 0.6 volts DC – 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Y

- The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR Part 64] Y
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Y
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Y
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Y

**S-348-2-12: 778 HP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-3  
(LIMITED TO 610 HP MAXIMUM)**

1. The permit unit has emission limits for all five criteria pollutants (NOx, SOx, PM10, CO, and VOC).
2. There are no add-on controls for SOx and PM10; therefore CAM is not applicable for SOx and PM10.
3. This permit unit may be subject to CAM for NOx, CO and VOC since there are NOx, CO and VOC limits and has an add-on control in the form of a 3-way non-selective catalytic converters. Based on the pre-controlled annual emissions (shown below), the major source thresholds of 20,000 lb-NOx/yr, 200,000 lb-CO/yr and 20,000 lb-VOC are exceeded. Therefore, the requirements of CAM are triggered.

Annual Post Project Emissions – S-348-2-12					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub> *	7.48	610	8760	453.6	88,118
CO**	16.99	610	8760	453.6	200,149
VOC***	2.91	610	8760	453.6	34,281

\* Emission factor based on Natural Gas use

\*\* Emission factor based on current PTO since it is greater than the CO EF from AP-42

\*\*\* Emission factor based on LPG use

The following conditions were approved during a previous Title V action (Project #S-1020393) and assure compliance with the CAM requirements:

- The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC – 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Y

- The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR Part 64] Y
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Y
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Y
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Y

**S-348-3-12: 778 HP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-4  
(LIMITED TO MAXIMUM 610 HP)**

1. The permit unit has emission limits for all five criteria pollutants (NOx, SOx, PM10, CO, and VOC).
2. There are no add-on controls for SOx and PM10; therefore CAM is not applicable for SOx and PM10.
3. This permit unit may be subject to CAM for NOx, CO and VOC since there are NOx, CO and VOC limits and has an add-on control in the form of a 3-way non-selective catalytic converters. Based on the pre-controlled annual emissions (shown below), the major source thresholds of 20,000 lb-NOx/yr, 200,000 lb-CO/yr and 20,000 lb-VOC are exceeded. Therefore, the requirements of CAM are triggered.

Annual Post Project Emissions – S-348-3-12					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub> *	7.48	610	8760	453.6	88,118
CO**	16.99	610	8760	453.6	200,149
VOC***	2.91	610	8760	453.6	34,281

\* Emission factor based on Natural Gas use

\*\* Emission factor based on current PTO since it is greater than the CO EF from AP-42

\*\*\* Emission factor based on LPG use

The following conditions were approved during a previous Title V action (Project #S-1020393) and assure compliance with the CAM requirements:

- The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC – 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Y



- The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR Part 64] Y
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Y
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Y
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Y

**S-348-4-9: 778 HP NATURAL GAS FIRED IC ENGINE WITH LPG AS BACK-UP FUEL, UNIT A-5**

1. The permit unit has emission limits for all five criteria pollutants (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC).
2. There are no add-on controls for SO<sub>x</sub> and PM<sub>10</sub>; therefore CAM is not applicable for SO<sub>x</sub> and PM<sub>10</sub>.
3. This permit unit may be subject to CAM for NO<sub>x</sub>, CO and VOC since there are NO<sub>x</sub>, CO and VOC limits and has an add-on control in the form of a 3-way non-selective catalytic converters. Based on the pre-controlled annual emissions (shown below), the major source thresholds of 20,000 lb-NO<sub>x</sub>/yr and 200,000 lb-CO/yr are exceeded. Therefore, the requirements of CAM are triggered.

Annual Post Project Emissions – S-348-4-9 (LPG)					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub>	4.87	778	336	453.6	2,807
CO*	16.99	778	336	453.6	9,791
VOC	2.91	778	336	453.6	1,677

\* Emission factor based on current PTO since it is greater than the CO EF from AP-42

Annual Post Project Emissions – S-348-4-9 (Natural Gas)					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub>	7.48	8,424	8760	453.6	108,075
CO*	16.99	8,424	8760	453.6	177,717
VOC	0.099	8,424	8760	453.6	1,430

\* Emission factor based on current PTO since it is greater than the CO EF from AP-42

Annual Post Project Emissions – S-348-4-9 (Total)			
Pollutant	PE2 LPG (lb/yr)	PE2 Natural Gas (lb/yr)	PE2 Total (lb/yr)
NO <sub>x</sub>	2,807	108,075	110,882
CO	9,791	177,717	187,508
VOC	1,677	1,430	3,107

The following conditions were approved during a previous Title V action (Project #S-1020393) and assure compliance with the CAM requirements:

- The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC – 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Y
- The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR Part 64] Y
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Y
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Y
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Y

**S-348-5-4:** 840 BHP WAUKESHA MODEL F3524 GSI NATURAL GAS AND LPG-FIRED IC ENGINE, A2-4 WITH ACTIVATED CARBON ON CRANKCASE BREATHER LINE

1. The permit unit has emission limits for all five criteria pollutants (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC).
2. There are no add-on controls for SO<sub>x</sub> and PM<sub>10</sub>; therefore CAM is not applicable for SO<sub>x</sub> and PM<sub>10</sub>.
3. This permit unit may be subject to CAM for NO<sub>x</sub>, CO and VOC since there are NO<sub>x</sub>, CO and VOC limits and has an add-on control in the form of a 3-way non-selective catalytic converters. Based on the pre-controlled annual emissions (shown below), the major source thresholds of 20,000 lb-NO<sub>x</sub>/yr and 20,000 lb-VOC are exceeded. Therefore, the requirements of CAM are triggered.

Annual Post Project Emissions – S-348-5-4					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub> *	7.48	840	8760	453.6	121,342
CO*	12.3	840	8760	453.6	199,533
VOC**	2.91	840	8760	453.6	47,207

\* Emission factor based on Natural Gas use

\*\* Emission factor based on LPG use

The following conditions are identical to the conditions that were approved during a previous Title V action (Project #S-1020393); therefore, these conditions will be listed on permit S-348-5-4 to assure compliance with the CAM requirements:

- The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC – 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Y
- The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR Part 64] Y
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Y
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Y
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Y

**S-348-6-3:** 76 HP FORD MODEL ESG642 NATURAL GAS/PROPANE-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (PUMP STATION A2)

1. The permit unit has emission limits for all five criteria pollutants (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC).
2. There are no add-on controls for SO<sub>x</sub> and PM<sub>10</sub>; therefore CAM is not applicable for SO<sub>x</sub> and PM<sub>10</sub>.
3. This permit unit may be subject to CAM for NO<sub>x</sub>, CO and VOC since there are NO<sub>x</sub>, CO and VOC limits and has an add-on control in the form of a 3-way non-selective catalytic converters. Based on the pre-controlled annual emissions (shown below), none of the major source thresholds are exceeded. Therefore, the requirements of CAM are not triggered.

Annual Post Project Emissions – S-348-6-3					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub> *	7.48	76	100	453.6	125
CO*	12.3	76	100	453.6	206
VOC**	2.91	76	100	453.6	49

\* Emission factor based on Natural Gas use

\*\* Emission factor based on LPG use

**Q. 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos**

These regulations apply to demolition or renovation activity, as defined in 40 CFR 61.141. 40 CFR Section 61.150 of this Subpart was amended September 18, 2003, and condition 35 of the facility-wide requirements (S-348-0-2) assures compliance with the requirements.

**R. 40 CFR Part 82, Subparts B and F, Stratospheric Ozone**

These regulations apply to servicing motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC). Sections of this regulation were amended in 2007 and 2008, and conditions 27 and 28 of S-348-0-2 assure compliance with the requirements.

**IX. PERMIT SHIELD**

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

**A. Requirements Addressed by Model General Permit Templates**

The applicant does not propose to use any model general permit templates.

**B. Requirements not Addressed by Model General Permit Templates**

The applicant is not requesting any new permit shields within this Title V renewal project. In addition, existing obsolete permit shields have been removed from the draft permit for this renewal project.

**X. PERMIT CONDITIONS**

See Attachment A - Draft Renewed Title V Operating Permit.

**XI. ATTACHMENTS**

- A. Draft Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List
- D. Stringency Analysis Rule 4601

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# ATTACHMENT A

Draft Renewed Title V Operating Permit

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# San Joaquin Valley Air Pollution Control District

FACILITY: S-348-0-2

EXPIRATION DATE: 10/31/2007

## FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 111 (Kern)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 111 (Kern)] Federally Enforceable Through Title V Permit
3. {2287} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {2289} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
6. {2290} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) (Permits Required) and Rule 2031 (12/17/92) (Transfer) shall be filed in a manner and form prescribed by the District and shall give all information necessary to enable the District to make determinations required by Rule 2070 (12/17/92) (Standards for Granting Applications). [District Rule 2040] Federally Enforceable Through Title V Permit
8. {2292} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: WEST KERN WATER DISTRICT  
Location: HWY 119 & CA AQUEDUCT STATION A, CA  
S-348-0-2 : Aug 25 2010 10:47AM - YOSHIMUJ

9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and copies of strip-chart recordings. Original strip-chart recordings shall be kept for one year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. {2294} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. {2295} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. {2296} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. {2297} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. {2298} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. {2299} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. {2300} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. {2301} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. {2302} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. {2303} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. {2304} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. {2305} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.



22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (2/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (Kern)] Federally Enforceable Through Title V Permit
23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Section 5.0 of District Rule 4601 (Amended 12/17/09), unless exempted under Section 4.0 of District Rule 4601. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling, Reporting and Test Methods requirements outlined in Rule 4601 (Amended 12/17/09) Sections 6.1, 6.2 and 6.3, unless exempted under Section 4.0 of District Rule 4601. [District Rule 4601, 6.1, 6.2 and 6.3] Federally Enforceable Through Title V Permit
26. {2310} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. {2311} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. {2312} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 (8/19/04) unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011 (8/19/04). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031 (8/19/04), unless specifically exempted under Section 4.0 of Rule 8031 or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 (8/19/04) Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 or Rule 8011 (8/19/04). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051 (8/19/04), unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011 (8/19/04). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 (8/19/04) unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

34. Any unpaved vehicle/equipment area that anticipates more than 50 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071 (9/16/04). Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. {2319} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. {2320} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. {2321} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. {2322} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Kern), Rule 111 (Kern). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601, sections 5.1, 5.2, 5.3, and 5.8 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (9/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin May 1 of every year. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-348-1-12

**EXPIRATION DATE:** 10/31/2007

**SECTION:** 05 **TOWNSHIP:** 31S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

778 HP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-2 (LIMITED TO MAXIMUM 610 HP)

## PERMIT UNIT REQUIREMENTS

1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
4. IC engine shall be equipped with controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
7. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Engine shall be equipped with RPM indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Maximum engine speed shall not exceed 1000 rpm. [District NSR Rule] Federally Enforceable Through Title V Permit
10. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
11. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) - 25 ppmv @ 15% O2, VOC - 125 ppmv @ 15% O2, CO - 2000 ppmv @ 15% O2, PM10 - 0.204 g/hp-hr, or SOx (as SO2) - 0.0145 g/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. Operator shall determine the sulfur content of each delivery of liquefied petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D-2784. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

15. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
19. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO]. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within five days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit
20. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit
21. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
22. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
23. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
24. The permittee shall record the O<sub>2</sub> sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
25. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

26. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
27. The results of the measurements taken with the District approved analyzer shall be maintained at the West Kern Water District office at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Operator shall maintain annual records of the fuel supplier invoices for LPG and the corresponding certified sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. The operator of this internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, along with records of the maximum daily engine rpm, including source test results for a minimum of five years, and shall make them available for District inspection upon request. [District Rules 2520, 9.4.2 and 4701, 6.2] Federally Enforceable Through Title V Permit
30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
32. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
33. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
35. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District NSR Rule, Rules 4701 and 4702] Federally Enforceable Through Title V Permit
36. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
37. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
38. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
39. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-348-2-12

**SECTION:** 05 **TOWNSHIP:** 31S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

778 HP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-3 (LIMITED TO 610 HP MAXIMUM)

**EXPIRATION DATE:** 10/31/2007

DRAFT

## PERMIT UNIT REQUIREMENTS

1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
4. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
7. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Engine shall be equipped with RPM indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Maximum engine speed shall not exceed 1000 rpm. [District NSR Rule] Federally Enforceable Through Title V Permit
10. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
11. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) - 25 ppmv @ 15% O2, VOC - 125 ppmv @ 15% O2, CO - 2000 ppmv @ 15% O2, PM10 - 0.204 g/hp-hr, or SOx (as SO2) - 0.0145 g/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. Operator shall determine the sulfur content of each delivery of liquefied petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

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15. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
19. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO]. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within five days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit
20. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit
21. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
22. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
23. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
24. The permittee shall record the O<sub>2</sub> sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
25. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit

26. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
27. The results of the measurements taken with the District approved analyzer shall be maintained at the West Kern Water District office at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Operator shall maintain annual records of the fuel supplier invoices for LPG and the corresponding certified sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. The operator of this internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, along with records of the maximum daily engine rpm, including source test results for a minimum of five years, and shall make them available for District inspection upon request. [District Rules 2520, 9.4.2 and 4701, 6.2] Federally Enforceable Through Title V Permit
30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
32. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
33. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
35. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District NSR Rule, Rules 4701 and 4702] Federally Enforceable Through Title V Permit
36. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
37. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
38. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
39. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-348-3-12

**EXPIRATION DATE:** 10/31/2007

**SECTION:** 05 **TOWNSHIP:** 31S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

778 HP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-4 (LIMITED TO MAXIMUM 610 HP)

## PERMIT UNIT REQUIREMENTS

1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
4. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
7. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Engine shall be equipped with RPM indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Maximum engine speed shall not exceed 1000 rpm. [District NSR Rule] Federally Enforceable Through Title V Permit
10. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
11. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) - 25 ppmv @ 15% O2, VOC - 125 ppmv @ 15% O2, CO - 2000 ppmv @ 15% O2, PM10 - 0.204 g/hp-hr, or SOx (as SO2) - 0.0145 g/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. Operator shall determine the sulfur content of each delivery of liquefied petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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15. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
19. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO]. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within five days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit
20. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit
21. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
22. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
23. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
24. The permittee shall record the O<sub>2</sub> sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
25. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit